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Document(s)	Country	Japan
	Publication No.	Japanese Patent Laid-open No. 2000-070317
	Publication Date	March 07, 2000
	Applicant	NIKON CORP
	Title of the invention	DEVICE AND METHOD FOR RECOVERING EYE ADAPTING FORCE

MANUAL TRANSLATION OF A PORTION OF THE REFERENCE

A light source constituted movably along a light axis integrally with an indicator 1 irradiates the indicator 1. Light from the indicator 1 is transmitted into an eye 3 to be detected via a lens 2 having a positive refracting power. In this case, for example, focal length of the lens 2 is about 250 mm, and distance between the lens 2 and the eye 3 to be detected is about 200 mm. Distance between the indicator 1 and the lens 2 is about 236.05 mm for far view, and is about 63.2 mm for close view. In the case of far view, a virtual image 4 of the indicator 1 is shown to a position about 50000 mm before the eye 3 to be detected, and is observed by the eye 3 to be detected. In the case of close view, the virtual image 4 of the indicator 1 is shown to a position about 300 mm before the eye. Several minute far view and close view observations are repeated. This can recover eye adapting force.

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Document(s)	Country	Japan
	Publication No.	Japanese Patent Laid-open No. 2003-334221
	Publication Date	November 25, 2003
	Applicant	NIKON CORP
	Title of the invention	IMAGE DISPLAY DEVICE AND ASTHENOPIA ELIMINATION DEVICE

MANUAL TRANSLATION OF A PORTION OF THE REFERENCE

The image display device is equipped with an image display means for displaying an image to respective left and right eyes, an image display means with the criterion of both eyes, a moving means moved in the optical axis directions of both eyes and a control means for controlling the movement of the image display means based on the moving means and changing the image displayed on the image display means on the basis of the position of the image display means.

PATENT ABSTRACTS OF JAPAN

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(21)Application number : 10-244609
(22)Date of filing : 31.08.1998

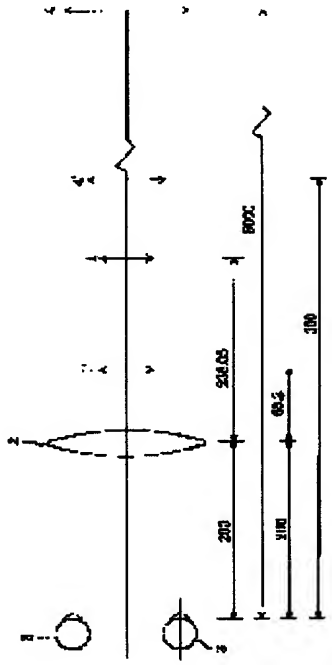
(71)Applicant : NIKON CORP
(72)Inventor : UENO YASUNORI

(54) DEVICE AND METHOD FOR RECOVERING EYE ADAPTING FORCE

(57)Abstract:

PROBLEM TO BE SOLVED: To allow recovery of eye adapting force by forming an image of a given indicator as a virtual image, showing it to an eye to be detected, and changing a showing distance between the eye to be detected and an indicator image forming position.

SOLUTION: A light source constituted movably along a light axis integrally with an indicator 1 irradiates the indicator 1. Light from the indicator 1 is transmitted into an eye 3 to be detected via a lens 2 having a positive refracting power. In this case, for example, focal length of the lens 2 is about 250 mm, and distance between the lens 2 and the eye 3 to be detected is about 200 mm. Distance between the indicator 1 and the lens 2 is about 236.05 mm for far view, and is about 63.2 mm for close view. In the case of far view, a virtual image 4 of the indicator 1 is shown to a position about 50000 mm before the eye 3 to be detected, and is observed by the eye 3 to be detected. In the case of close view, the virtual image 4 of the indicator 1 is shown to a position about 300 mm before the eye. Several minute far view and close view observations are repeated. This can recover eye adapting force.



* NOTICES *

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CLAIMS

[Claim(s)]
[Claim 1]An eye regulation power recovery device comprising:
A predetermined index.
An index image presenting means for forming an image of said index as a virtual image, and showing optometry-ed said formed index image.
A presentation distance change means for changing presentation distance between said optometry-ed and a formation position of said index image.

[Claim 2]The eye regulation power recovery device according to claim 1, wherein said index image presenting means has an index projection optical system which has positive refracting power as a whole.
[Claim 3]The eye regulation power recovery device according to claim 2, wherein said presentation distance change means changes distance in alignment with an optic axis of said index and said index projection optical system.
[Claim 4]The eye regulation power recovery device according to claim 3, wherein said presentation distance change means moves said index projection optical system in accordance with an optic axis.
[Claim 5]The eye regulation power recovery device according to claim 3 or 4, wherein said presentation distance change means moves said index in accordance with an optic axis.
[Claim 6]The eye regulation power recovery device according to claim 3 evacuating an index of another side from an optical path while having the following and inserting one index of said first-digit mark and said second-digit marks into an optical path.
Said presentation distance change means is a first-digit mark which can be inserted and detached freely to the 1st position in an optical path.
Said 1st position is a second-digit mark which can be inserted and detached freely to the 2nd position in a different optical path.

[Claim 7]It is the method of delaying a fall of an operation of said ciliary muscle and

recovering eye regulation power by repeating stress and relaxation of an examining-the eyes ciliary muscle, A process which only predetermined time shows said index image which formed an image of said index in a distant place or **** as a virtual image from said optometry-ed, and was formed in a distant place or **** to optometry-ed, The eye regulation power method of recovery repeating a process which only predetermined time shows said index image which formed an image of said index in **** or a distant place as a virtual image from said optometry-ed, and was formed in a method of **, or a distant place to optometry-ed.

[Claim 8]The eye regulation power method of recovery according to claim 7, wherein said predetermined time is for several minutes.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Field of the Invention]Especially this invention relates to the device and method of recovering eye regulation power by delaying the fall of an operation of the ciliary muscle which declines with age about an eye regulation power recovery device and a method.
[0002]
[Description of the Prior Art]Even if eye regulation power (focus adjustment power of an eye) declines and it adjusts with age, near viewing is in the state which became difficult, and a presbyopia state is a kind of degraded phenomenon. The increase in the curvature of a lens becoming less enough as a cause of decline of this regulation power, even if the zonula ciliaris's loosens by contraction of ** ciliary muscle, and the thing which an operation of a ciliary muscle becomes weak with ** age (that is, it falls) can be considered.
[0003]
[Problem(s) to be Solved by the Invention]In order to prevent an operation of this ciliary muscle falling, the trial which is going to delay the fall of an operation of the ciliary muscle by age, and is going to recover regulation power is performed by using a ciliary muscle intentionally.
[0004]This invention is made in view of the above-mentioned technical problem, and is a thing.
The purpose is to provide the device and method of recovering eye regulation power by delaying the fall of an operation of the ciliary muscle which declines.

[0005]
[Means for Solving the Problem]An index image presenting means for forming an image of a predetermined index and said index as a virtual image, and showing optometry-ed said formed index image in this invention, in order to solve said technical problem, An eye regulation power recovery device provided with a presentation distance change means for changing presentation distance between said optometry-ed and a formation position of said

index image is provided.

[0006]According to the desirable mode of this invention, said index image presenting means has an index projection optical system which has positive refracting power as a whole. In this case, as for said presentation distance change means, it is preferred to change distance in alignment with an optic axis of said index and said index projection optical system. Furthermore, in this case, said presentation distance change means moves said index projection optical system in accordance with an optic axis, moves said index in accordance with an optic axis, or to the 1st position in an optical path A first-digit mark which can be inserted and detached freely, It has a second-digit mark which can be inserted and detached freely to the 2nd position in a different optical path from said 1st position, and while inserting one index of said first-digit mark and said second-digit marks into an optical path, an index of another side is evacuated from an optical path.

[0007]By repeating stress and relaxation of an examining-the eyes ciliary muscle according to another aspect of affairs of this invention, It is the method of delaying a fall of an operation of said ciliary muscle and recovering eye regulation power, A process which only predetermined time shows said index image which formed an image of said index in a distant place or **** as a virtual image from said optometry-ed, and was formed in a distant place or **** to optometry-ed, The eye regulation power method of recovery repeating a process which only predetermined time shows said index image which formed an image of said index in **** or a distant place as a virtual image from said optometry-ed, and was formed in a method of ** or a distant place to optometry-ed is provided. In this case, as for said predetermined time, it is preferred that it is for several minutes.

[0008]

[Embodiment of the Invention]Drawing 2 is a figure for explaining the optical principle of this invention in illustration, (a) shows the optical arrangement for far viewing, and (b) shows the optical arrangement for near viewing, respectively. In drawing 2, the lens 2 is arranged at the distance of 200 mm of examining 3-the eyes front. The lens 2 has positive refracting power and the focal distance is 250 mm.

[0009]First, in the optical arrangement for the far viewing of drawing 2 (a), about the lens 2, the index 1 is arranged in an opposite hand and the interval of the index 1 and the lens 2 is set as 236.05 mm in the optometry 3-ed. Therefore, the optometry 3-ed is shown the virtual image 4 of the index 1 formed with the lens 2 in the 5000-mm (namely, 5 m) front from the optometry 3-ed in this case. When it puts in another way, the optometry 3-ed will observe the index of 5-m beyond, i.e., the index for far viewing.

[0010]On the other hand, in the optical arrangement for the near viewing of drawing 2 (b), the interval of the index 1 and the lens 2 is set as 63.2 mm. Therefore, the optometry 3-ed is shown the virtual image 4 of the index 1 formed with the lens 2 in the 300-mm (namely, 30 cm) front from the optometry 3-ed in this case. When it puts in another way, the optometry 3-ed will observe the index of 30-cm beyond, i.e., the index for near viewing.

[0011]Thus, between the optical arrangement for the far viewing of drawing 2 (a), and the

optical arrangement for the near viewing of drawing 2 (b), By what the interval of the index 1 and the lens 2 is switched for (it is made to change), the distance (namely, presentation distance of an index) of the optometry 3-ed and the formation position of the virtual image 4 and the magnification of the virtual image 4 can be changed. What is necessary is just to move either [at least] the index 1 or the lenses 2 to an optical axis direction, in order to change the interval of the index 1 and the lens 2.

[0012]As mentioned above, the process which only predetermined time shows the index image which formed the image of the index in a distant place or **** as a virtual image from optometry-ed, and was formed in a distant place or **** in this invention to optometry-ed, The process which only predetermined time shows the index image which formed the image of the index in **** or a distant place as a virtual image from optometry-ed, and was formed in the method of ** or the distant place to optometry-ed is repeatable. As a result, it becomes possible by repeating stress and relaxation of an examining-the eyes ciliary muscle to delay the fall of an operation of the ciliary muscle by age, and to recover eye regulation power.

[0013]Hereafter, the example of this invention is described based on an accompanying drawing. Drawing 1 is a figure showing roughly the composition of the eye regulation power recovery device concerning the example of this invention. The device of drawing 1 is provided with the index 1. The index 1 is illuminated with the light source which omitted the graphic display, for example. This light source is constituted movable in accordance with the optic axis in one with the index 1. The light from the illuminated index 1 enters into the optometry 3-ed via the lens 2 which has positive refracting power.

[0014]Arrangement of the examining 3-the eyes lens 2 and the index 1 describes this example as what is as above-mentioned drawing 2 showing for simplification here of explanation. Although drawing 2 has indicated only the state of a monocular vision for simplification of a figure, it cannot be overemphasized that it can apply also in the state of a binocular vision like drawing 1 actually. That is, in this example, the lens 2 has a focal distance of 250 mm, and the interval of the lens 2 and the optometry 3-ed is 200 mm. In the optical arrangement for far viewing, the interval of the index 1 and the lens 2 is set as 236.05 mm, and the interval of index 1' and the lens 2 is set as 63.2 mm in the optical arrangement for near viewing.

[0015]Therefore, as mentioned above, in the optical arrangement for far viewing in which the interval of the index 1 and the lens 2 was set as 236.05 mm, the optometry 3-ed will be shown the virtual image 4 of the index 1 ahead [5000 mm (namely, 5 m)], and the optometry 3-ed will observe the index of 5-m beyond as a result. On the other hand, in the optical arrangement for near viewing by which the interval of index 1' and the lens 2 was set as 63.2 mm, the optometry 3-ed will be shown virtual-image 4of index 1" ahead [300 mm (namely, 30 cm)], and the optometry 3-ed will observe the index of 30-cm beyond as a result.

[0016]In this example, after showing an index for several minutes to optometry-ed by the

optical arrangement for far viewing, the process of showing an index for several minutes to optometry-ed by the optical arrangement for near viewing is repeated. Or after showing an index for several minutes to optometry-ed by the optical arrangement for near viewing, the process of showing an index for several minutes to optometry-ed by the optical arrangement for far viewing is repeated. As a result, it becomes possible by repeating stress and relaxation of an examining-the eyes ciliary muscle to delay the fall of an operation of the ciliary muscle by age, and to recover eye regulation power.

[0017]In an above-mentioned example, although the index is moved to the optical axis direction between the optical arrangement for far viewing, and the optical arrangement for near viewing, a lens may be moved to an optical axis direction and only distance which is different in an optical axis direction may move both an index and a lens. The index of the optical arrangement for far viewing and the index of the optical arrangement for near viewing are prepared independently, and while inserting one index into an optical path according to desired optical arrangement, the index of another side may be evacuated from an optical path.

[0018]

[Effect of the Invention]As explained above, according to this invention, the process of showing optometry-ed an index in the optical arrangement for far viewing, and the process of showing optometry-ed an index in the optical arrangement for near viewing are repeated. As a result, it becomes possible by repeating stress and relaxation of an examining-the eyes ciliary muscle to delay the fall of an operation of the ciliary muscle by age, and to recover eye regulation power.

[Translation done.]

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]
[Drawing 1]It is a figure showing roughly the composition of the eye regulation power recovery device concerning the example of this invention.
[Drawing 2]It is a figure for explaining the optical principle of this invention in illustration, and (a) shows the optical arrangement for far viewing, and (b) shows the optical arrangement for near viewing, respectively.
[Description of Notations]
1 and 1' index
2 Positive lens
3 Optometry-ed
4 and 4' virtual image

[Translation done.]

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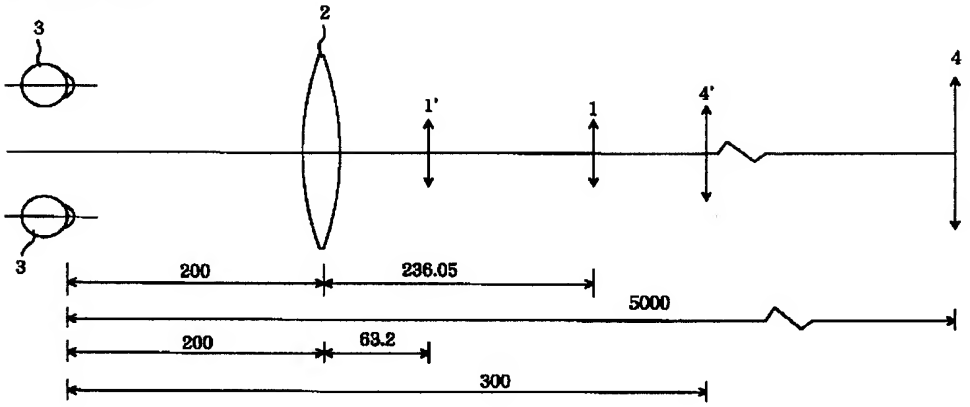
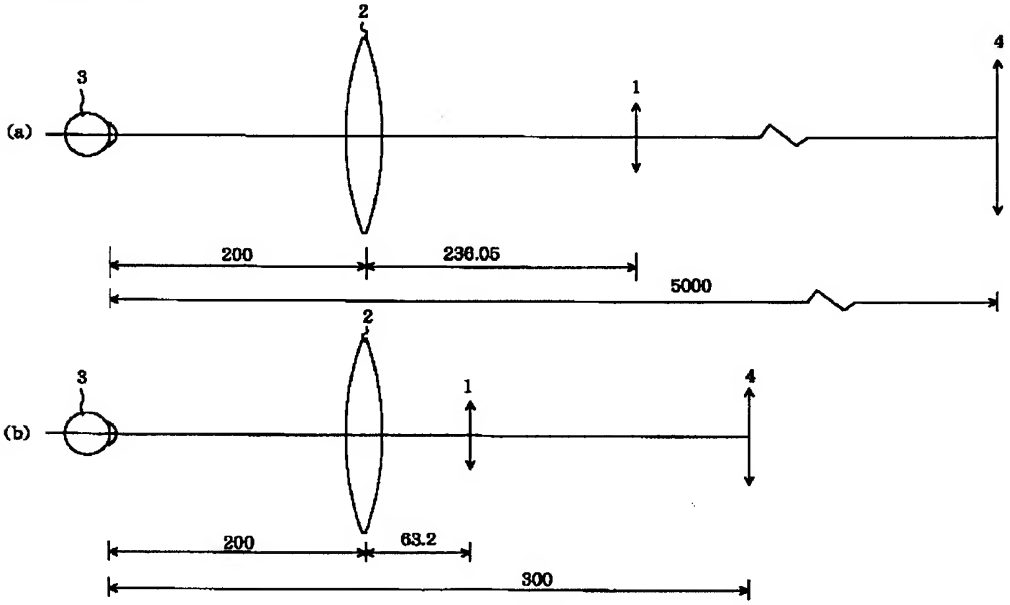
DRAWINGS

[Drawing 1]



[Drawing 2]



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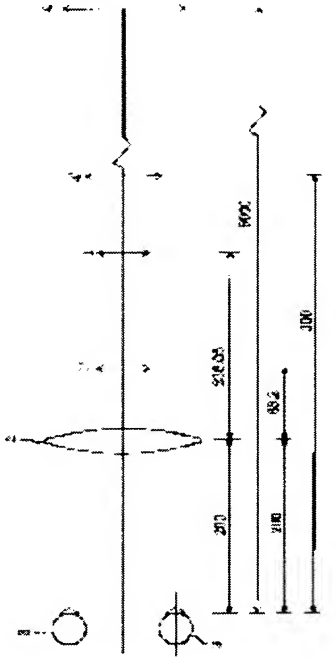
SOLUTION: A light source constituted movably along a light axis integrally with an indicator 1 irradiates the indicator 1. Light from the indicator 1 is transmitted into an eye 3 to be detected via a lens 2 having a positive refracting power. In this case, for example, focal length of the lens 2 is about 250 mm, and distance between the lens 2 and the eye 3 to be detected is about 200 mm. Distance between the indicator 1 and the lens 2 is about 236.05 mm for far view, and is about 63.2 mm for close view. In the case of far view, a virtual image 4 of the indicator 1 is shown to a position about 50000 mm before the eye 3 to be detected, and is observed by the eye 3 to be detected. In the case of close view, the virtual image 4 of the indicator 1 is shown to a position about 300 mm before the eye. Several minute far view and close view observations are repeated. This can recover eye adapting force.



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【審査請求】未請求 【請求項の数】８ 【出願形態】ＯＬ 【全頁数】４

(21)【出願番号】特願平 10-244609
(22)【出願日】平成 10 年 8 月 31 日(1998.8.31)
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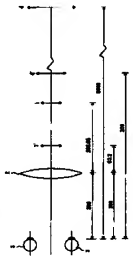
(74)【代理人】100095256【弁理士】 山口 孝雄

(54)【発明の名称】**眼調節力回復装置および方法**

(57)【要約】
【課題】 年齢とともに衰える毛様体筋の作用の低下を遅らせることによって眼調節力を回復させる装置。
【解決手段】 所定の指標（１、１’）と、指標の像を虚像（４、４’）として形成し、形成した指標像を被検眼（３）に提示するための指標像提示手段（２）と、被検眼と指標像の形成位置との間の提示距離を変化させるための提示距離変化手段とを備えている。



【特許請求の範囲】

【請求項１】 所定の指標と、前記指標の像を虚像として形成し、形成した前記指標像を被検眼に提示するための指標像提示手段と、前記被検眼と前記指標像の形成位置との間の提示距離を変化させるための提示距離変化手段とを備えていることを特徴とする眼調節力回復装置。

【請求項２】 前記指標像提示手段は、全体として正の屈折力を有する指標投影光学系を有することを特徴とする請求項１に記載の眼調節力回復装置。

【請求項３】 前記提示距離変化手段は、前記指標と前記指標投影光学系との光軸に沿った距離を変化させることを特徴とする請求項２に記載の眼調節力回復装置。

【請求項４】 前記提示距離変化手段は、前記指標投影光学系を光軸に沿って移動させることを特徴とする請求項３に記載の眼調節力回復装置。

【請求項５】 前記提示距離変化手段は、前記指標を光軸に沿って移動させることを特徴とする請求項３または４に記載の眼調節力回復装置。

【請求項６】 前記提示距離変化手段は、光路中の第１位置に対して挿脱自在な第１指標と、前記第１位置とは異なる光路中の第２位置に対して挿脱自在な第２指標とを有し、前記第１指標および前記第２指標のうちの一方の指標を光路中に挿入するとともに他方の指標を光路から退避させることを特徴とする請求項３に記載の眼調節力回復装置。

【請求項７】 被検眼の毛様体筋の緊張と弛緩とを繰り返すことにより、前記毛様体筋の作用の低下を遅らせて眼調節力を回復させる方法であって、前記被検眼から遠方または近方に前記指標の像を虚像として形成し、遠方または近方に形成した前記指標像を被検眼に対して所定時間だけ提示する工程と、前記被検眼から近方または遠方に前記指標の像を虚像として形成し、近方または遠方に形成した前記指標像を被検眼に対して所定時間だけ提示する工程とを繰り返すことを特徴とする眼調節力回復方法。

【請求項８】 前記所定時間は、数分間であることを特徴とする請求項７に記載の眼調節力回復方法。

【発明の詳細な説明】

【０００１】

【発明の属する技術分野】本発明は眼調節力回復装置および方法に関し、特に年齢とともに衰える毛様体筋の作用の低下を遅らせることによって眼調節力を回復させる装置および方法に関するものである。

【０００２】

【従来の技術】老視状態とは、年齢とともに眼調節力（眼のピント調整力）が減退し、調節しても近方視が困難になった状態であり、一種の老化現象である。この調節力の減退の原因として、①毛様体筋の収縮により毛様体小帯が弛緩しても水晶体の曲率の増加が十分でなくなること、および②年齢とともに毛様体筋の作用が弱くなる（すなわち低下する）ことが考えられる。

【０００３】

【発明が解決しようとする課題】この毛様体筋の作用が低下することを防ぐために、毛様体筋を意識的に働かせることによって、年齢による毛様体筋の作用の低下を遅らせて調節力を回復させようとする試みが行われている。

【０００４】本発明は、前述の課題に鑑みてなされたものであり、年齢とともに衰える毛様体筋の作用の低下を遅らせることによって眼調節力を回復させる装置および方法を提供することを目的とする。

【０００５】

【課題を解決するための手段】前記課題を解決するために、本発明では、所定の指標と、前記指標の像を虚像として形成し、形成した前記指標像を被検眼に提示するための指標像提示手段と、前記被検眼と前記指標像の形成位置との間の提示距離を変化させるための提示距離変化手段とを備えていることを特徴とする眼調節力回復装置を提供する。

【０００６】本発明の好ましい態様によれば、前記指標像提示手段は、全体として正の屈折力を有する指標投影光学系を有する。この場合、前記提示距離変化手段は、前記指標と前記指標投影光学系との光軸に沿った距離を変化させることが好ましい。さらにこの場合、前記提示距離変化手段は、前記指標投影光学系を光軸に沿って移動させるか、あるいは前記指標を光軸に沿って移動させるか、あるいは光路中の第１位置に対して挿脱自在な第１指標と、前記第１位置とは異なる光路中の第２位置に対して挿脱自在な第２指標とを有し、前記第１指標および前記第２指標のうちの一方の指標を光路中に挿入するとともに他方の指標を光路から退避させる。

【０００７】また、本発明の別の局面によれば、被検眼の毛様体筋の緊張と弛緩とを繰り返すことにより、前記毛様体筋の作用の低下を遅らせて眼調節力を回復させる方法であって、前記被検眼から遠方または近方に前記指標の像を虚像として形成し、遠方または近方に形成した前記指標像を被検眼に対して所定時間だけ提示する工程と、前記被検眼から近方または遠方に前記指標の像を虚像として形成し、近方または遠方に形成した前記指標像

を被検眼に対して所定時間だけ提示する工程とを繰り返すことを特徴とする眼調節力回復方法を提供する。この場合、前記所定時間は、数分間であることが好ましい。

【０００８】

【発明の実施の形態】図２は、本発明の光学的原理を例示的に説明するための図であって、（ａ）は遠方視用の光学配置を、（ｂ）は近方視用の光学配置をそれぞれ示している。図２において、被検眼３の前方２００ｍｍの距離に、レンズ２が配置されている。レンズ２は正の屈折力を有し、その焦点距離は２５０ｍｍである。

【０００９】まず、図２（ａ）の遠方視用の光学配置において、レンズ２に関して被検眼３とは反対側に指標１が配置され、指標１とレンズ２との間隔が２３６．０５ｍｍに設定される。したがって、この場合、被検眼３には、被検眼３から５０００ｍｍ（すなわち５ｍ）前方においてレンズ２によって形成された指標１の虚像４が提示される。換言すると、被検眼３は、５ｍ先の指標すなわち遠方視用の指標を観察することになる。

【００１０】一方、図２（ｂ）の近方視用の光学配置においては、指標１とレンズ２との間隔が６３．２ｍｍに設定される。したがって、この場合、被検眼３には、被検眼３から３００ｍｍ（すなわち３０ｃｍ）前方においてレンズ２によって形成された指標１の虚像４が提示される。換言すると、被検眼３は、３０ｃｍ先の指標すなわち近方視用の指標を観察することになる。

【００１１】このように、図２（ａ）の遠方視用の光学配置と図２（ｂ）の近方視用の光学配置との間で、指標１とレンズ２との間隔を切り換える（変化させる）ことによって、被検眼３と虚像４の形成位置との距離（すなわち指標の提示距離）および虚像４の倍率を変化させることができる。なお、指標１とレンズ２との間隔を変化させるには、指標１およびレンズ２のうちの少なくとも一方を光軸方向に移動させればよい。

【００１２】以上のように、本発明では、被検眼から遠方または近方に指標の像を虚像として形成し、遠方または近方に形成した指標像を被検眼に対して所定時間だけ提示する工程と、被検眼から近方または遠方に指標の像を虚像として形成し、近方または遠方に形成した指標像を被検眼に対して所定時間だけ提示する工程とを繰り返すことができる。その結果、被検眼の毛様体筋の緊張と弛緩とを繰り返すことにより、年齢による毛様体筋の作用の低下を遅らせて眼調節力を回復させることが可能になる。

【００１３】以下、本発明の実施例を、添付図面に基づいて説明する。図１は、本発明の実施例にかかる眼調節力回復装置の構成を概略的に示す図である。図１の装置は、指標１を備えている。指標１は、たとえば図示を省略した光源によって照明されている。この光源は、指標１と一体的に光軸に沿って移動可能に構成されている。照明された指標１からの光は、正の屈折力を有するレンズ２を介して、被検眼３に入射する。

【００１４】ここで、説明の簡略化のために、被検眼３、レンズ２および指標１の配置は、上述の図２で示す通りであるものとして本実施例を説明する。なお、図２は図の簡略化のため単眼視の状態しか記載していないが、実際には図１のように両眼視の状態でも適用可能であることはいうまでもない。すなわち、本実施例において、レンズ２は２５０ｍｍの焦点距離を有し、レンズ２と被検眼３との間隔は２００ｍｍである。また、遠方視用の光学配置では指標１とレンズ２との間隔が２３６．０５ｍｍに設定され、近方視用の光学配置では指標１’とレンズ２との間隔が６３．２ｍｍに設定される。

【００１５】したがって、前述したように、指標１とレンズ２との間隔が２３６．０５ｍｍに設定された遠方視用の光学配置では、被検眼３には５０００ｍｍ（すなわち５ｍ）前方に指標１の虚像４が提示され、結果として被検眼３は５ｍ先の指標を観察することになる。一方、指標１’とレンズ２との間隔が６３．２ｍｍに設定された近方視用の光学配置においては、被検眼３には３００ｍｍ（すなわち３０ｃｍ）前方に指標１’の虚像４’が提示され、結果として被検眼３は３０ｃｍ先の指標を観察することになる。

【００１６】本実施例では、遠方視用光学配置で被検眼に対して数分間に亘って指標を提示した後に、近方視用光学配置で被検眼に対して数分間に亘って指標を提示するという工程が繰り返される。あるいは、近方視用光学配置で被検眼に対して数分間に亘って指標を提示した後に、遠方視用光学配置で被検眼に対して数分間に亘って指標を提示するという工程が繰り返される。その結果、被検眼の毛様体筋の緊張と弛緩とを繰り返すことにより、年齢による毛様体筋の作用の低下を遅らせて眼調節力を回復させることが可能になる。

【００１７】なお、上述の実施例では、遠方視用光学配置と近方視用光学配置との間で指標を光軸方向に移動させているが、レンズを光軸方向に移動させてもよいし、指標およびレンズをともに光軸方向に異なる距離だけ移動させてもよい。さらに、遠方視用光学配置の指標と近

方視用光学配置の指標とを別々に用意し、所望の光学配置にしたがって一方の指標を光路中に挿入するとともに他方の指標を光路から退避させてもよい。

【００１８】

【発明の効果】以上説明したように、本発明によれば、遠方視用光学配置において被検眼に指標を提示する工程と、近方視用光学配置において被検眼に指標を提示する工程とが繰り返される。その結果、被検眼の毛様体筋の緊張と弛緩とを繰り返すことにより、年齢による毛様体筋の作用の低下を遅らせて眼調節力を回復させることが可能になる。

【図面の簡単な説明】

【図１】本発明の実施例にかかる眼調節力回復装置の構成を概略的に示す図である。

【図２】本発明の光学的原理を例示的に説明するための図であって、（ａ）は遠方視用の光学配置を、（ｂ）は近方視用の光学配置をそれぞれ示している。

【符号の説明】

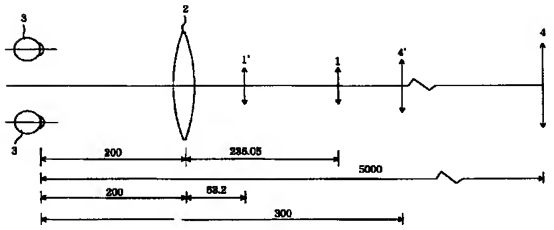
１、１’　指標

２　正レンズ

３　被検眼

４、４’　虚像

【図１】



【図２】